Contents

CiF Lab Solutions APEX-air™ Series Fume Hood

GENERAL – CiF is pleased to offer our general purpose line of fume hoods and fume hood accessories for the K-12 environment. CiF has partnered with one of the industry's leading manufacturers to produce a high quality line of fume hoods. Combined with our manufacturing partner we bring over 50 years of experience and state-of-the-art engineering and testing facilities to provide you with a fume hood unsurpassed in quality and performance.

GP – General purpose laboratory fume hood.

TESTING – Safety should be the number one concern when choosing a Fume Hood. That is why CiF tests and certifies each style Fume Hood in accordance with the current ASHRAE method of testing performance of laboratory Fume Hoods.

The ASHRAE 110 test procedure is an industry standard, recognized by SEFA and the American Conference of Governmental Industrial Hygienists, for safe Fume Hood performance.

REFERENCES – The American Industrial Hygiene Association, The American Conferences of Governmental Industrial Hygienists and the American Society of Heating, Refrigerating and Air-Conditioning Engineers have all published guidelines on Fume Hood face velocities and operating procedures.

Because the performance of a Fume Hood is greatly affected by the surrounding conditions, the recommendations in this catalog are based on normal or average conditions. For recommendations on ideal or extreme conditions, the guidelines published by the above referenced agencies should be followed.

SPECIFICATIONS – CiF Fume Hoods are manufactured in strict accordance with the specifications shown in this catalog. However, continuous testing and research may result in design and specification changes without advance notice.

APEX-air™ Type 100 Fume Hoods

Type 100 Open Bypass Fume Hoods are designed to maintain a relatively constant face velocity by allowing room air through the bypass area as the sash is lowered.
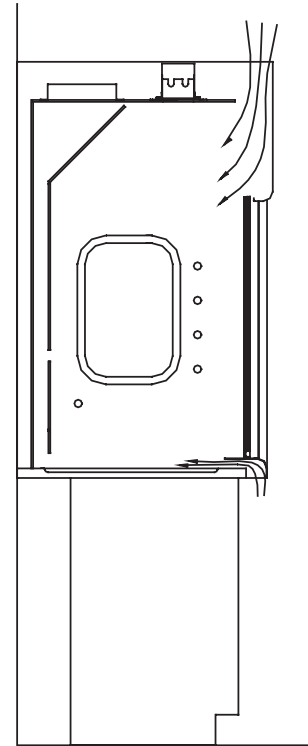
APEX-air™ GP Series Bench Fume Hood

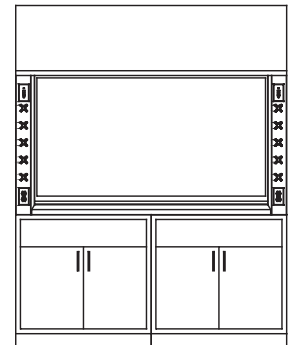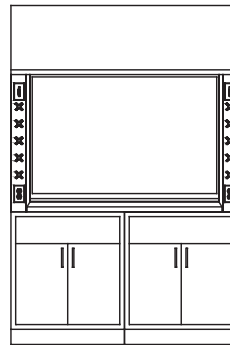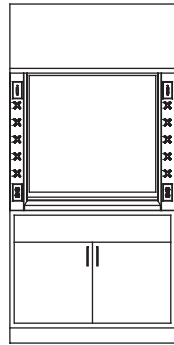| GP SERIES BENCH FUME HOOD									
Hood Size	Collar Size	Full Open 100 FPM		Full Open 80 FPM		18" Open 100 FPM		18" Open 80 FPM	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP
4'	10" Dia.	739	.26	591	.16	475	.11	380	.07
5'	11" Dia.	972	.29	778	.18	625	.12	500	.08
6'	12" Dia.	1206	.30	964	.19	775	.12	620	.08
8'	(2) 10" Dia.	1672	.30	1338	.19	1075	.12	860	.08

Standard Features and Benefits

A. UL listed, white fiberglass reinforced thermoset polyester interior lining

B. Gasketed interior access panels for easy access to utility lines

C. Durable, painted lower airfoil

D. Flawless movement of PVC framed vertical sash with laminated safety glass.

E. For ease of installation, fixture holes are pre-punched and capped unless specified otherwise

• Proper air balance with a fixed, non-adjustable baffe system

• T8 fluorescent light fixture, sealed from interior with laminated safety glass

• Round type 304 stainless steel duct collar

• Rigid and corrosion resistant PVC sash guides

• Reliable cable and pulley counter balance system

• Flat front posts and radiused for smooth airfow entry into the hood

• Down draft bypass for efficient air fow

• 28-inch sash opening

• 35-inch window height for full viewing of the hood interior

• Reduction in required lab space with a 33 1/2-inch hood depth and designed for a 30-inch deep countertop (29-inch deep cabinet face)

Optional Features

• Rectangular, type 304 or 316, stainless steel duct collar

• Flush airfoil / containment trough with pivot in painted, 304 or 316 stainless steel

• Chain and sprocket sash counter balance system

• Sash stop

• Louvered front panel

• Alarms, plumbing and electrical fixtures

• LED light fixture
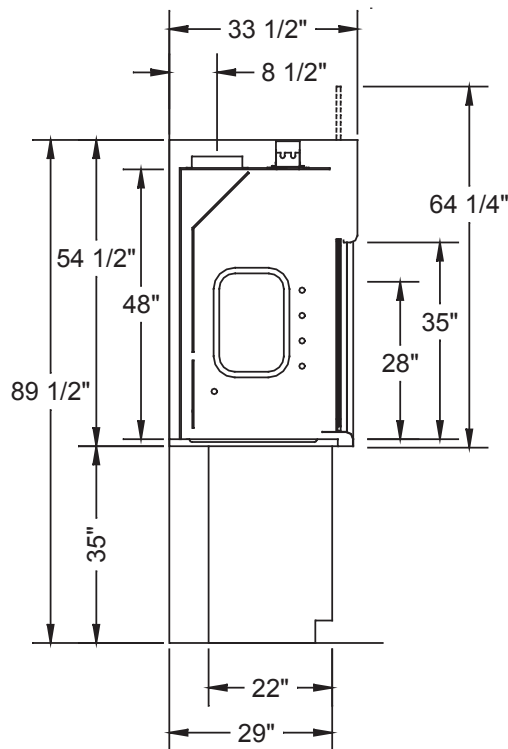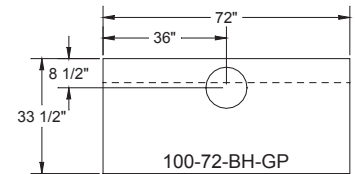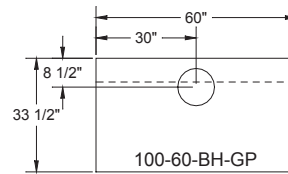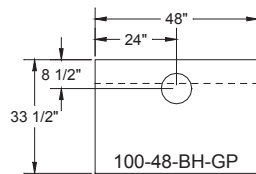
APEX-air™ GP Series Bench Fume Hood

CAT. NO.	**100-48-BH-GP**	**100-60-BH-GP**	**100-72-BH-GP**
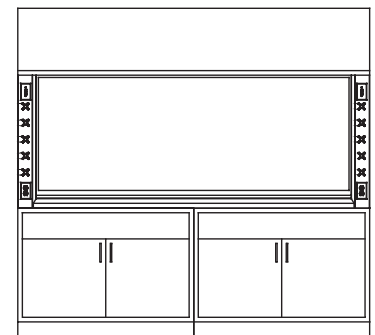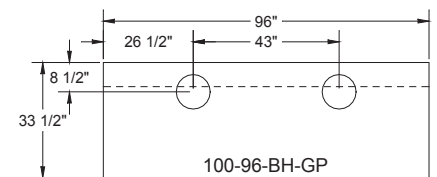
48"
24"
8 1/2"
33 1/2"
100-48-BH-GP

60"
30"
8 1/2"
33 1/2"
100-60-BH-GP

72"
36"
8 1/2"
33 1/2"
100-72-BH-GP

33 1/2"
8 1/2"
64 1/4"
54 1/2"
48"
35"
28"
89 1/2"
35"
22"
29"

Section View

100-96-BH-GP

96"
26 1/2"
43"
8 1/2"
33 1/2"
100-96-BH-GP

APEX-air™ GP Series Double Sided Bench Fume Hood

Hood Size	Collar Size	Full Open 100 FPM		Full Open 80 FPM		18" Open 100 FPM		18" Open 80 FPM	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP
4'	10" DIA.	1108	.58	887	.37	844	.33	676	.21
5'	11" DIA.	1458	.64	1167	.41	1111	.37	889	.24
6'	12" DIA.	1808	.68	1447	.43	1378	.39	1102	.25
8'	(2) 10" DIA.	2508	.68	2007	.43	1911	.39	1529	.25

GP SERIES DOUBLE SIDED BENCH FUME HOOD (based on one side open and the other side closed)

Standard Features and Benefits

- UL listed, white fiberglass reinforced thermoset polyester interior lining.

- Proper air balance with a sash interlock allowing only one sash to open at a time

- T8 fluorescent light fixture, sealed from interior with laminated safety glass

- Round type 304 stainless steel duct collar

- Gasketed interior access panels for easy access to utility lines

- Durable, painted lower airfoil

- Rigid and corrosion resistant PVC sash guides

- Flawless movement of PVC framed vertical sash with laminated safety glass

- Full width PVC sash pull

- Reliable cable and pulley counter balance system

- Flat front posts and radiused for smooth airflow entry into the hood

- Down draft bypass for efficient air flow

- 28-inch sash opening

- 35-inch window height for full viewing of the hood interior

- For ease of installation, fixture holes are pre-punched and capped unless specified otherwise

- Reduction in required lab space with a 37-inch hood depth and designed for a 30-inch deep countertop (28-inch deep cabinet)

Optional Features

- Rectangular, type 304 or 316, stainless steel duct collar

- Flush airfoil / containment trough with pivot in painted, 304 or 316 stainless steel

- Sash stop

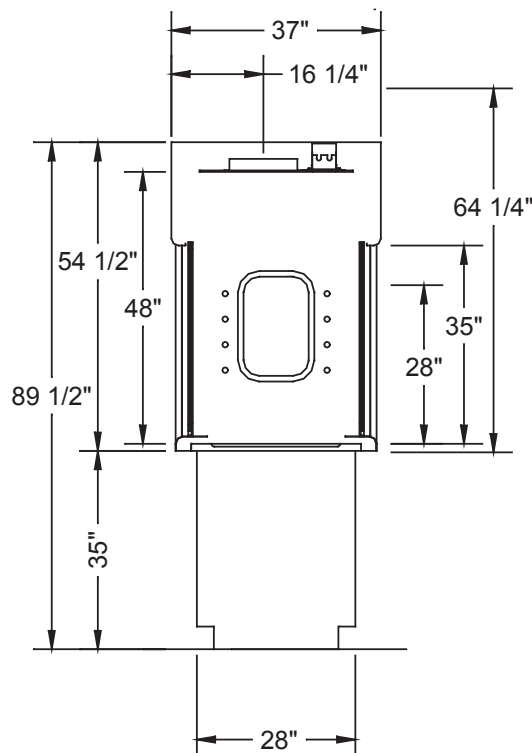- Louvered front panels

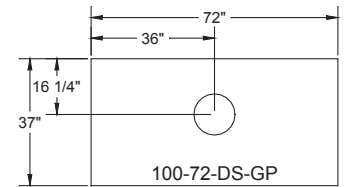- Alarms, plumbing and electrical fixtures
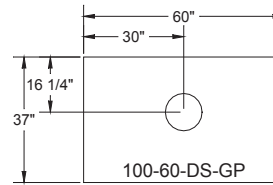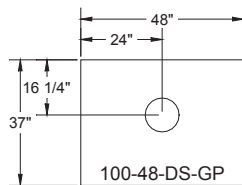
- LED light fixture

APEX-air™ GP Series Double Sided Bench Fume Hood

CAT. NO.

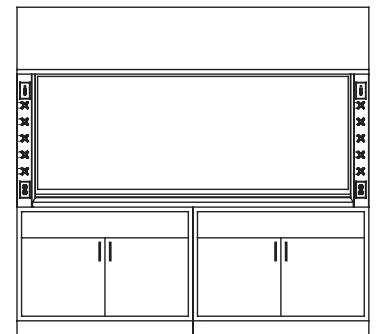| 100-48-DS-GP | 100-60-DS-GP | 100-72-DS-GP |
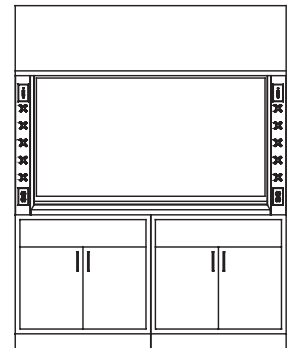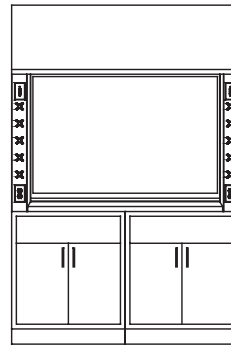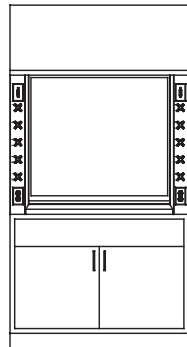
100-48-DS-GP

100-60-DS-GP

100-72-DS-GP

Section View

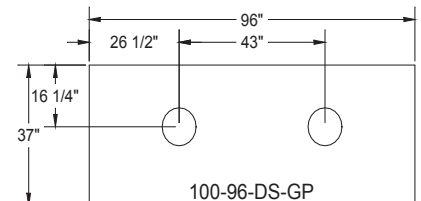**100-96-DS-GP**

100-96-DS-GP

- Cabinet and fixture configurations shown on this page are optional and not included in the fume hood model number.

- Hoods are UL1805 Classified in the US and UL Listed in Canada.

APEX-air™ GP Series
Barrier Free (ADA) Fume Hood

		Full Open 100 FPM		Full Open 80 FPM		18" Open 100 FPM		18" Open 80 FPM	
Hood Size	Collar Size	CFM	SP	CFM	SP	CFM	SP	CFM	SP
4'	10" DIA.	739	.26	591	.16	475	.11	380	.07
5'	11" DIA.	972	.29	778	.18	625	.12	500	.08
6'	12" DIA.	1206	.30	964	.19	775	.12	620	.08
8'	(2) 10" DIA.	1672	.30	1338	.19	1075	.12	860	.08

**GP SERIES BARRIER FREE (ADA) FUME HOOD**

Standard Features and Benefits

- UL listed, white fiberglass reinforced thermoset polyester interior lining
- Fixtures located within 48-inches from the foor
- Proper air balance with a fixed, non-adjustable baffle system
- T8 fluorescent light fixture, sealed from interior with laminated safety glass
- Round type 304 stainless steel duct collar
- Gasketed interior access panels for easy access to utility lines
- Durable, painted lower airfoil
- Rigid and corrosion resistant PVC sash guides
- Flawless movement of PVC framed vertical sash with laminated safety glass
- Full width PVC sash pull
- Reliable cable and pulley counter balance system
- Flat front posts and radiused for smooth airflow entry into the hood
- For ease of installation, fixture holes pre-punched and capped unless specified otherwise
- Down draft bypass for efficient air flow
- 28-inch sash opening
- 35-inch window height for full viewing of the hood interior
- Reduction in required lab space with a 33 1/2-inch hood depth and designed for a 30-inch deep countertop (29-inch deep cabinet face)

Optional Features

- Rectangular, type 304 or 316, stainless steel duct collar
- Flush airfoil / containment trough with pivot in painted, 304 or 316 stainless steel (This is a recommended option.)
- Chain and sprocket sash counter balance system
- Sash stop
- Louvered front panel
- Alarms, plumbing and electrical fixtures
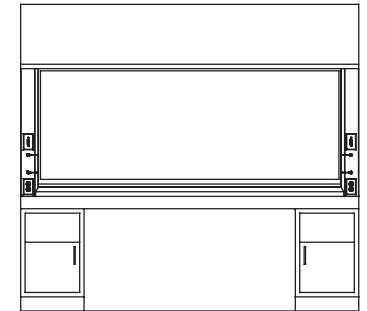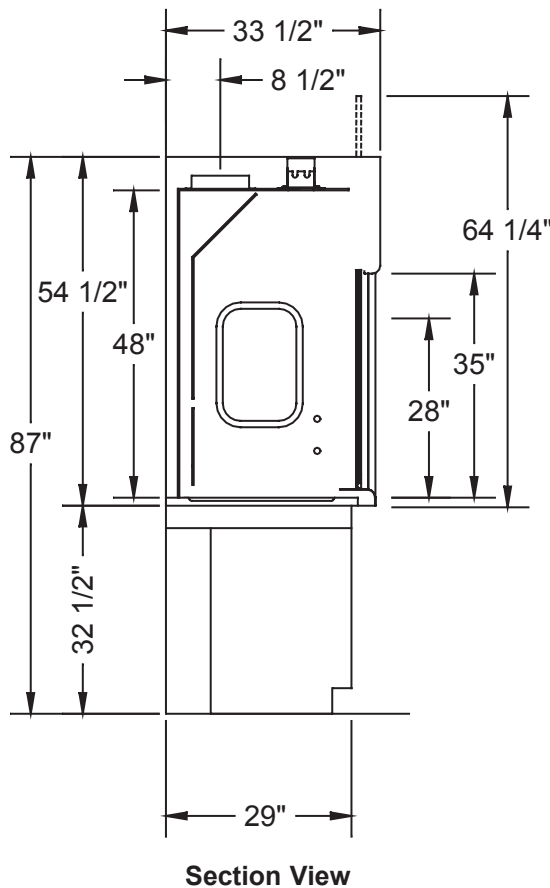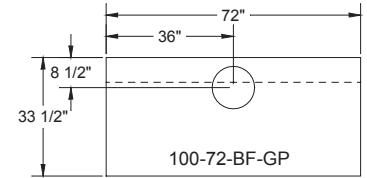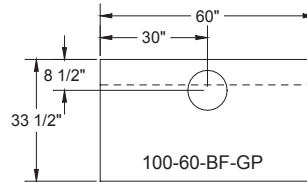- LED light fixture

APEX-air™ GP Series
Barrier Free (ADA) Fume Hood
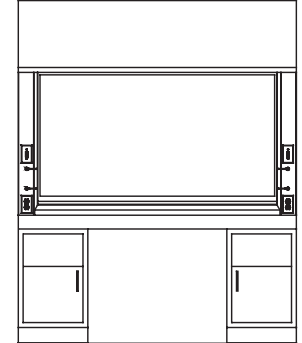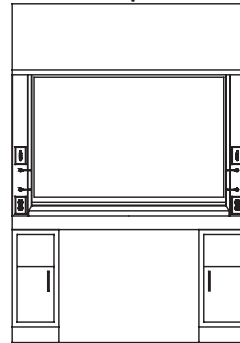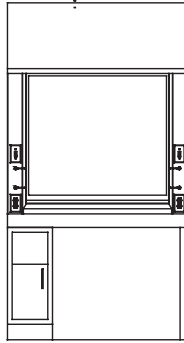
CAT. NO.

| 100-48-BF-GP | 100-60-BF-GP | 100-72-BF-GP |

100-60-BF-GP

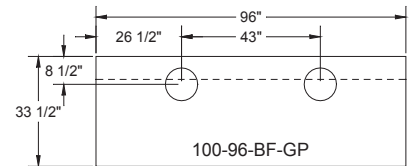100-72-BF-GP

33 1/2"
8 1/2"
64 1/4"
54 1/2"
48"
35"
28"
87"
32 1/2"
29"

Section View

| 100-96-BF-GP |

100-96-BF-GP

- Cabinet and fixture configurations shown on this page are optional and not included in the fume hood model number.

- Hoods are UL1805 Classified in the US and UL Listed in Canada.

APEX-air™ GP Series
Single Sided Teaching Fume Hood

| Hood Size	Collar Size	18" Open 100 FPM		18" Open 80 FPM	
		CFM	SP	CFM	SP
4'	4" X 30"	550	.15	440	.09
5'	4" X 30"	700	.18	560	.12
6'	4" X 30"	850	.21	680	.13

GP SERIES SINGLE SIDED TEACHING FUME HOOD

Standard Features and Benefits

A. ¼-inch laminated safety glass sides and back

B. Durable, painted lower airfoil / containment trough

C. Flawless movement of PVC framed vertical sash with laminated safety glass

D. Flat front posts

• Design allows for complete visibility while working in the hood

• Rectangular steel duct collar

• T8 fluorescent light fixture, sealed from interior with laminated safety glass

• Painted steel sash guides

• Full width PVC sash pull

• Automatic sash return to 18-inches with sash stop at full open

• Chain and sprocket counter balance system

• 28-inch sash opening

• 36-inch window height for full viewing of the hood interior

Optional Features

• Alarms, plumbing and electrical fixtures

• White Resin-Chem back panel in lieu of glass for installation against wall

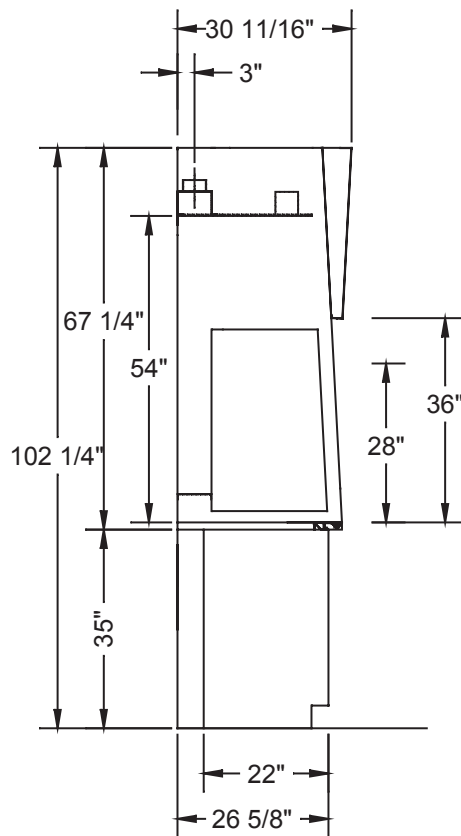• Louvered front panel / bypass

• LED light fixture

APEX-air™ GP Series
Single Sided Teaching Fume Hood

| CAT. NO. | 100-48-ST-GP | 100-60-ST-GP | 100-72-ST-GP |
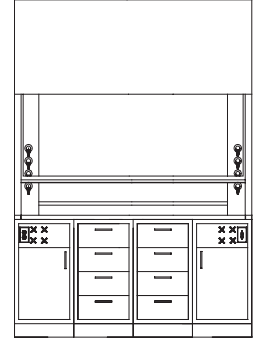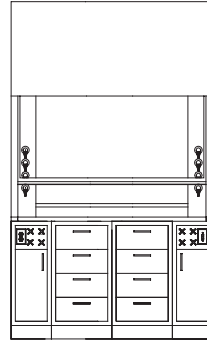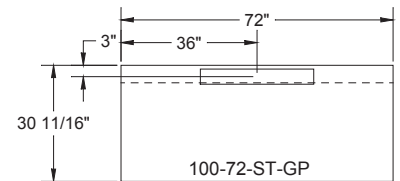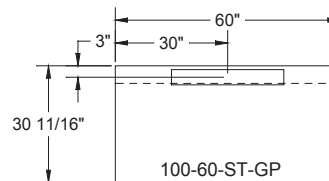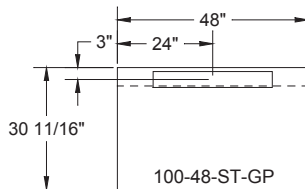
100-48-ST-GP

100-60-ST-GP

100-72-ST-GP

Section View

- Cabinet and fixture configurations shown on this page are optional and not included in the fume hood model number.

- Hoods are UL1805 Classified in the US and UL Listed in Canada.

APEX-air™ GP Series
Double Sided Teaching Fume Hood

| GP SERIES DOUBLE SIDED TEACHING FUME HOOD (*Exhaust volume per side, double for total volume)		DUAL EXHAUST				SINGLE EXHAUST			
Hood Size	Collar Size	Full Open 100 FPM		Full Open 80 FPM		18" Open 100 FPM		18" Open 80 FPM	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP
4'	4" X 30"	550*	.15	440*	.09	1100	.25	880	.15
5'	4" X 30"	700*	.18	560*	.12	1400	.30	1120	.20
6'	4" X 30"	850*	.21	680*	.13	1700	.35	1700	.22

Standard Features and Benefits

- Design allows for complete visibility while working in the hood

- ¼-inch laminated safety glass sides and back

- Proper air balance with a fixed, non-adjustable baffle system

- T8 fluorescent light fixture, sealed from interior with laminated safety glass

- Rectangular steel duct collar

- Durable, painted lower airfoil / containment trough

- Painted steel sash guides

- Full width PVC sash pull

- Flawless movement of PVC framed vertical sash with laminated safety glass

- Automatic sash return to 18-inches with sash stop at full open

- Chain and sprocket counter balance system

- Flat front posts

- 28-inch sash opening

- 36-inch window height for full viewing of the hood interior

Optional Features

- Stainless steel, type 304 or 316, lower airfoil / containment trough

- Single duct connection in lieu of two back to back connections

- Alarms, plumbing and electrical fixtures

- Louvered front panel / bypass

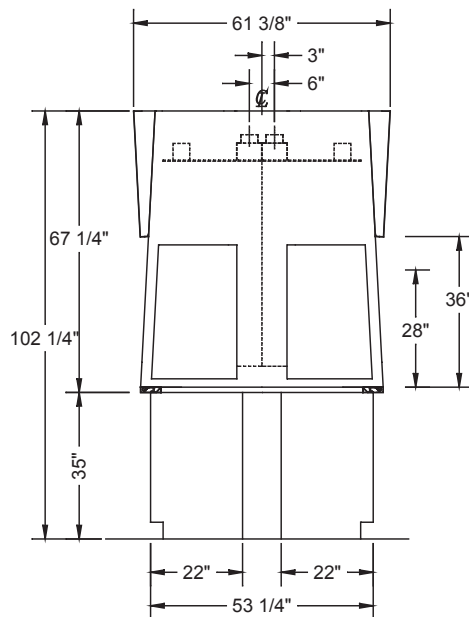- LED light fixture

APEX-air™ GP Series
Double Sided Teaching Fume Hood

CAT. NO.

100-48-DT-GP	100-60-DT-GP	100-72-DT-GP
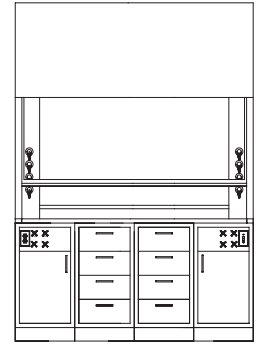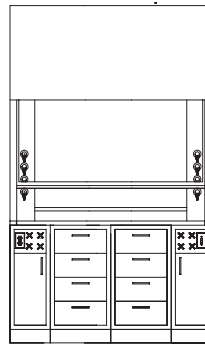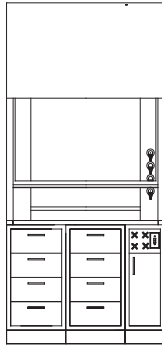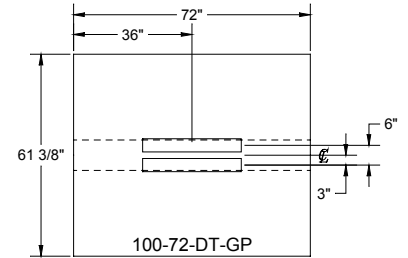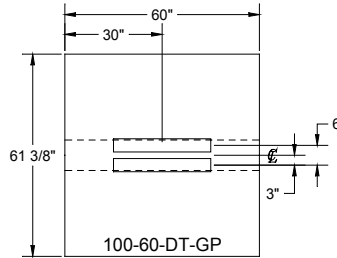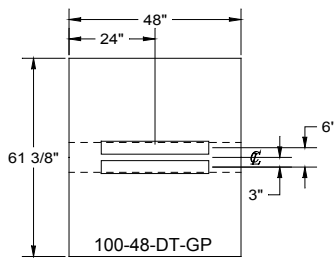
100-48-DT-GP

100-60-DT-GP

100-72-DT-GP

Section View

- Cabinet and fixture configurations shown on this page are optional and not included in the fume hood model number.

- Hoods are UL1805 Classified in the US and UL Listed in Canada.

APEX-air™ GP Series Demonstration Fume Hood

| GP SERIES TYPE 100 OPEN BYPASS DEMONSTRATION HOOD (based on one side open and the other side closed)									
Hood Size	Collar Size	Full Open 100 FPM		Full Open 80 FPM		18" Open 100 FPM		18" Open 80 FPM	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP
4'	6" X 16"	925	.34	740	.22	668	.18	534	.11
5'	6" X 16"	1225	.60	980	.39	885	.31	708	.20

Standard Features and Benefits

- UL listed, white fiberglass reinforced thermoset polyester interior lining

- Proper air balance with a fixed, non-adjustable baffle system

- Industry standard, T8 fluorescent light fixture, sealed from interior with laminated safety glass

- Rectangular type 304 stainless steel duct collar

- Rigid and corrosion resistant PVC sash guides

- Flawless movement of PVC framed vertical sash with laminated safety glass

- Full width PVC sash pull

- Reliable cable and pulley counter balance system

- Flat front posts

- Sash interlock allowing only one sash to open at a time

Optional Features

- Rectangular, type 304 or 316, stainless steel duct collar

- Sash stop

- Keyed sash stop

- Keyed sash lock

- Louvered front panel

- Alarms, plumbing and electrical fixtures

- Explosion proof lights and outlets

APEX-air™ GP Series
Demonstration Fume Hood
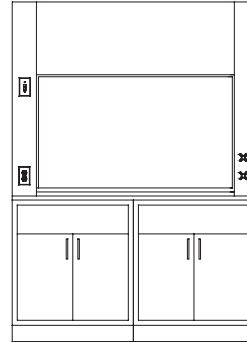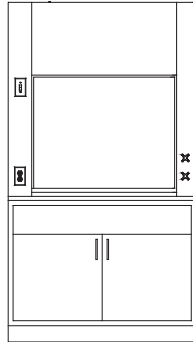
CLASSIFIED UL

c (UL) LISTED

CAT. NO.

| 100-48-DH-GP | 100-60-DH-GP |

- Cabinet and fixture configurations shown on this page are optional and not included in the fume hood model number.

- Hoods are UL1805 Classified in the US and UL Listed in Canada.

100-48-DH-GP

100-60-DH-GP
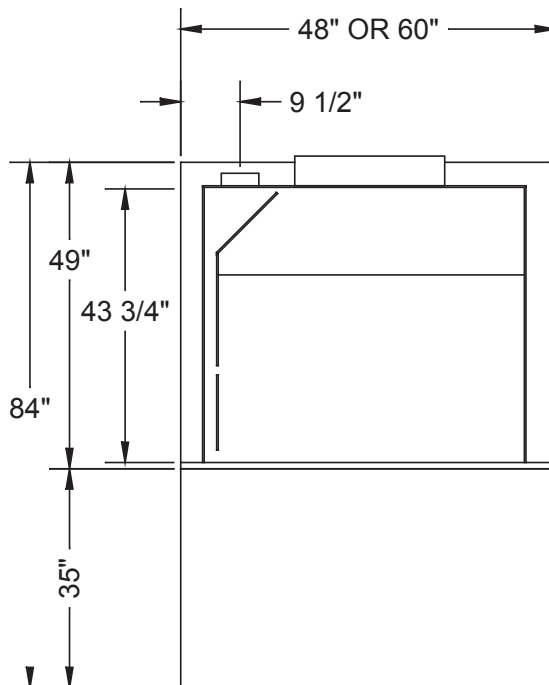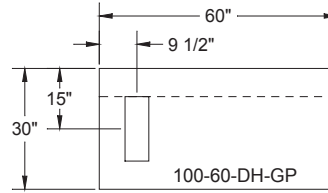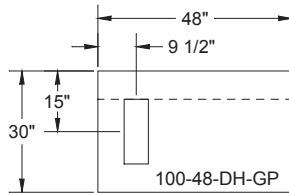
Front View

End View

Canopy Fume Hood

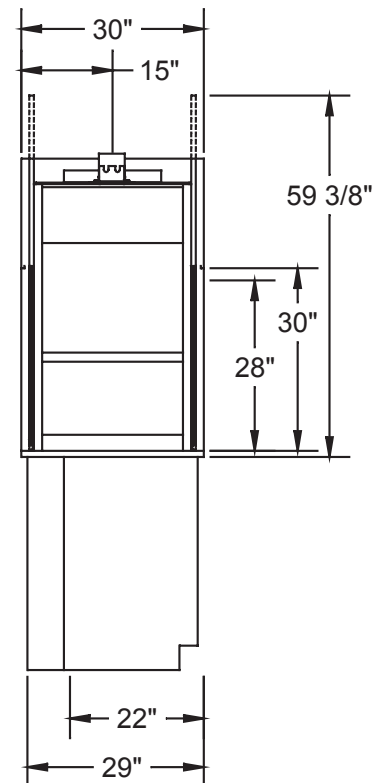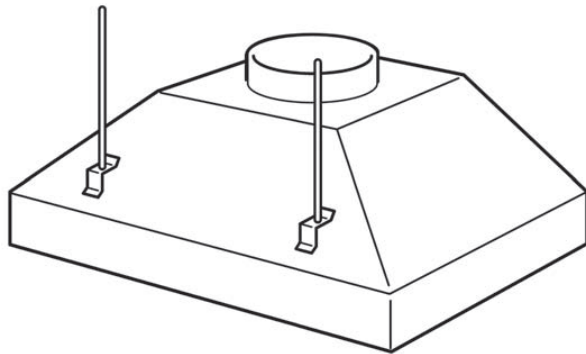| CANOPY HOODS				
MODEL NUMBER	SIZE	COLLAR SIZE	50 FPM	
			CFM	SP
3' FB773	36"	12"	963	.16
4' FB774	48"	12"	1138	.17
5' FB775	60"	12"	1313	.29
6' FB776	72"	12"	1502	.36

Threaded rods not included.

Canopy Hoods are specifically designed for exhausting non-hazardous materials such as heat, steam and odors.

Canopy Hoods are constructed of epoxy coated steel in any of our standard colors. Three sizes are available for wall or corner mounting. Due to the many variations in wall and ceiling construction, mounting hardware is not included. Special size and configuration Canopy Hoods are available upon request.

The CFM listed above is based on 50 FPM with the Canopy Hood mounted 42-inches above the work surface and the front and one side open. The static pressures shown are for the Hood only. An appropriate amount will have to be added to this figure to compensate for the pressure drop through the duct system. The total pressure drop through the Hood and the duct system must be known to select the proper exhaust blower.

FUME HOOD SINKS			
WIDTH	NO CUP SINK	1 CUP SINK	2 CUP SINK
48"	FB840	FB841	FB842
60"	FB850	FB851	FB852
72"	FB860	FB861	FB862
84"	FB870	FB871	FB872
96"	FB880	FB881	FB882
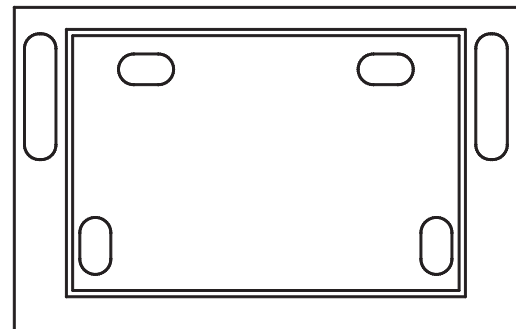
# Fume Hood Work Surfaces

Fume hood work surfaces are molded from a modified epoxy resin that has been especially compounded and cured to provide optimum physical and chemical resistance required for a heavy-duty laboratory work surface. Work Surfaces are 1" thick with a 3/8" deep dishing to contain spills and have a non-glaring black finish. Also available in 16 gauge type 304 dished stainless steel.
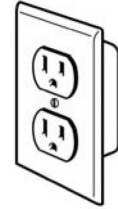
Fume Hood Accessories

CAT. NO. FF200

DESC. **Single Pole Light Switch**
- 115 volt / 20 amp
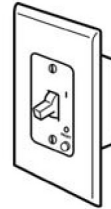
FF210

Manual Motor Starter Switch with Pilot Light
- 1 hp/115-230 VAC
- Heating element not included

FF221 (125 Volt / 20 Amp)

Duplex Receptacle
- NEMA 5-20R

CAT. NO. FF225

DESC. **GFI Duplex Receptacle**
- 125 volt / 20 amp
- NEMA 5-20R

Please Note:

Flush mount electrical service fixtures come complete with device box and stainless steel face plate.

For pre-wiring of electrical fixtures, contact CiF Solutions for a custom part number in addition to the electrical fixture number.

Pre-wiring of explosion proof fixtures on application only.

Remote Control Fume Hood Accessories
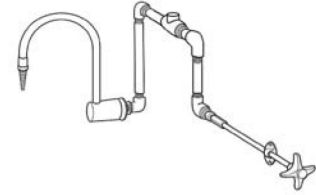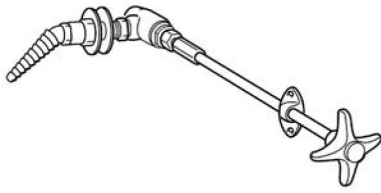
CAT. NO.

FF100-01 (Remote Service Valve With Angled Hose Cock Outlet)
FF100-02 (With Front Loaded Valve)
FF100-03 (With ADA Lever Handle & Ball Valve)

FF110-01 (Remote Service Valve With Gooseneck)
FF110-02 (With Front Loaded Valve)
FF110-03 (With ADA Lever Handle & Ball Valve)

FF120-01 (Remote Service Valve with Gooseneck & Vacuum Breaker)
FF120-02 (With Front Loaded Valve)
FF120-03 (ADA Lever Handle & Ball Valve)
FF120-04 (With Remote Valve & Vacuum Breaker Located on Top Front of Hood)
FF120-05 (With Front Loaded Valve & Vacuum Breaker Located on Top Front of Hood)
FF120-06 (ADA Lever Handle & Ball Valve & Vacuum Breaker Located on Top Front of Hood)

DESC.

Remote Service Valve with Angled Hose Cock Outlet
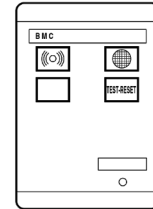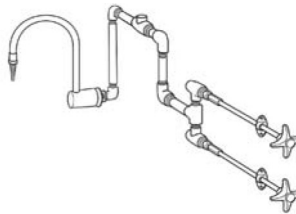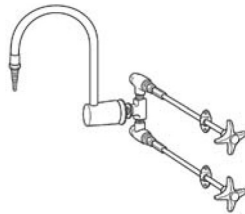• For use with gas, air, vacuum, steam or other special gases. Specify type of service.

Remote Service Valve with Gooseneck
• For use with water; specify hot or cold water

Remote Service Valve with Gooseneck and Vacuum Breaker
• For use with water; specify hot or cold water

CAT. NO.

FF125-01 (Dual Remote Service Valves with Gooseneck)
FF125-02 (With Front Loaded Valves)
FF125 (With ADA Lever Handle & Ball Valves)

FF130-01 (Dual Remote Service Valves with Gooseneck & Vacuum Breaker)
FF130-02 (With Front Loaded Valves)
FF130-03 (With ADA Lever Handle & Ball Valves)
FF130-04 (With Remote Valves & Vacuum Breaker Located on Top Front of Hood)

FF278 (Air Velocity Monitor and Alarm)

DESC.

Dual Remote Service Valve with Gooseneck
• For use with hot and cold water

Dual Remote Service Valve with Gooseneck and Vacuum Breaker
• For use with hot and cold water

Air Velocity Monitor and Arm
• Measures the face velocity of the Fume Hood. The monitor includes a visual safe indicator light, visual alarm indicator light, audible alarm and a test reset button which also manually silences the alarm. Field calibration requires the use of an optional air flow measuring device.

PLEASE NOTE: Remote control valves have forged brass valve bodies for strength and durability. Valves for gas, air, vacuum and special gases are of needle type design with a stainless steel foating cone and stainless steel replaceable seat. Valves for steam service have a fat Tefon valve disc and stainless steel replaceable seat; valves for water service have a renewable unit including a stainless steel seat and volume control. All outlet assemblies are furnished with a polished chrome plated finish. For acid and solvent resistant coatings add the following suffix to part numbers.

Brass With Clear Epoxy — 01   Brass With Color Coded Epoxy — 02   Color Coded Nylon — 03

For factory setting of a service fixture, contact CiF Solutions for a custom part number in addition to the service fixture number. For factory setting and piping of service fixtures, contact CiF Solutions for a custom part number in addition to the service fixture number.

Fume Hood Ceiling Enclosures

Ceiling Enclosures are designed to be mounted on top of a Fume Hood and extend up through a drop-in ceiling. A front access panel is provided for relamping of the hood.

For use with ceiling heights from 102" to 108" only.

CEILING ENCLOSURES	
WIDTH	CAT. NO.
48"	FB794
60"	FB795
72"	FB796
84"	FB797
96"	FB798

Sash Stop

Limiting the sash opening of a Fume Hood can greatly reduce the amount of air required to achieve a required face velocity.

FB-780 Sash Stop limits the vertical rising of the sash by 50 percent. A manual override allows you to fully open the sash for setups or cleaning. The Sash Stop re-engages as the sash is lowered below it.

Also available is the Keyed Sash Lock.